

03040205-07

(*Black River*)

General Description

Watershed 03040205-07 (formerly 03040205-120, 130, 140) is located in Florence, Clarendon, and Williamsburg Counties and consists primarily of the **Black River** and its tributaries from Pudding Swamp to the crossing of SC Hwy 30. The watershed occupies 209,555 acres of the Lower Coastal Plain region of South Carolina. Land use/land cover in the watershed includes: 31.8% agricultural land, 29.4% forested wetland, 26.4% forested land, 6.5% scrub/shrub land, 5.7% urban land, 0.1% nonforested wetland, and 0.1% water.

This middle section of the Black River accepts drainage from its upper reaches and Clapp Swamp (Long Branch, Bull Branch, Spring Branch), Kingstree Swamp Canal (Smiths Bay, Findley Bay, Sandy Bay), and Laws Swamp. Rocky Ford Swamp (Chaney Swamp) and Dickey Swamp (Mulberry Branch, Bennett Swamp, Mill Branch, Pushing Branch, Shanty Branch) join to form Laws Swamp, which flows into the river downstream of the Kingstree Swamp Canal. Further downstream, the river accepts drainage from Thorntree Swamp, Stony Run Branch, Boggy Swamp, McElroy Branch, Camden Swamp, and Ox Swamp (Gumtree Branch). There are a total of 212.1 stream miles and 137.1 acres of lake waters in this watershed. The Black River is classified FW* (Dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.0) and the remaining streams are classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
PD-696	BIO	FW	CLAPP SWAMP AT SR 47
RS-02325	RS02	FW	CLAPP SWAMP AT SC 527
PD-044	S/INT	FW*	BLACK RIVER AT US 52 AT KINGSTREE
PD-358	W/INT	FW	KINGSTREE SWAMP CANAL AT SC 527
PD-206	BIO	FW	DICKEY SWAMP AT SR 220
PD-045	S/W	FW*	BLACK RIVER AT SC 377 AT BRYAN'S CROSSROADS
PD-697	BIO	FW	BOGGY SWAMP AT SC 527
PD-629	BIO	FW	OX SWAMP AT US 521
(PD-359)	W	FW*	BLACK RIVER AT S-45-30

Clapp Swamp - There are two SCDHEC monitoring sites along Clapp Swamp. This is a blackwater system, characterized by naturally low pH conditions. At the upstream site (**PD-696**), aquatic life uses are fully supported based on macroinvertebrate community data. At the downstream site (**RS-02325**), aquatic life uses are not supported due to dissolved oxygen excursions. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are fully supported at this site.

Black River - There are two SCDHEC monitoring sites along this section of the Black River (**PD-044**, **PD-045**). **PD-359** is not physically located in this watershed, but being just downstream, represents the water quality in this watershed. Aquatic life and recreational uses are fully supported at all sites. This is a blackwater system, characterized by naturally low dissolved

oxygen concentration conditions. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter at all sites.

Kingstree Swamp Canal (PD-358) - Aquatic life and recreational uses are fully supported. This is a blackwater system, characterized by naturally low dissolved oxygen concentration conditions. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Significant decreasing trends in five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters.

Dickie Swamp (PD-206) - Aquatic life uses are fully supported based on macroinvertebrate community data.

Boggy Swamp (PD-697) - Aquatic life uses are fully supported based on macroinvertebrate community data.

Ox Swamp (PD-629) - Aquatic life uses are fully supported based on macroinvertebrate community data.

*A fish consumption advisory has been issued by the Department for mercury and includes the **Black River** within this watershed (see advisory p.72).*

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-020	GB	BLACK CREEK	KINGSTREE ROUTE 377

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
KINGSTREE SWAMP CANAL TRIBUTARY MARTEK BIOSCIENCES KINGSTREE PIPE #: 001 FLOW: 1.73 PIPE #: 002 FLOW: 2.09	SC0003123 MINOR INDUSTRIAL (FERMPRO)
BLACK RIVER MILLIKEN & CO./KINGSTREE MILL PIPE #: 001 FLOW: 0.373	SC0023493 MINOR INDUSTRIAL
BLACK RIVER HARDY C. BROWN/527 DIRT PIT PIPE #: 001 FLOW: M/R	SCG730220 MINOR INDUSTRIAL

BLACK RIVER
SC PRESTRESS/SAND PLANT I
PIPE #: 001 FLOW: M/R

SCG730712
MINOR INDUSTRIAL

BLACK RIVER
TOWN OF KINGSTREE
PIPE #: 001 FLOW: 3.5

SC0035971
MAJOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME
FACILITY TYPE

PERMIT #
STATUS

WILLIAMSBURG COUNTY LANDFILL #1
INDUSTRIAL

IWP-114
INACTIVE

TRAVENOL LABORATORIES, INC.
INDUSTRIAL

453305-1601
INACTIVE

BLACK RIVER CORP.
MUNICIPAL

452499-3001
ACTIVE

GAUSE TROY -FILL
MUNICIPAL

INACTIVE

ARC TECHNOLOGY FACILITY
RD&D

452767-8001
ACTIVE

WILLIAMSBURG CO. INDUSTRIAL LANDFILL
INDUSTRIAL

IWP-153
CLOSED

MARTEK
INDUSTRIAL

453349-1601
ACTIVE

WILLIAMSBURG COUNTY LANDFILL
MUNICIPAL

451001-1101
ACTIVE

WILLIAMSBURG COUNTY C&D LANDFILL
CONSTRUCTION

451001-1201
ACTIVE

WILLIAMSBURG COUNTY SHREDDER
MUNICIPAL PULVERIZATION SITE

DWP-055
CLOSED

TOWN OF KINGSTREE DUMP#1
MUNICIPAL

CLOSED

TOWN OF KINGSTREE DUMP #2
MUNICIPAL

CLOSED

WHITAKER AIR CURTAIN INCINERATOR
INCINERATOR

402769-4001
ACTIVE

Mining Activities

MINING COMPANY
MINE NAME

PERMIT #
MINERAL

WEAVER CONSTRUCTION CO., INC.
LIFRAGE MINE

1342-89
SAND; SAND/CLAY

S.C. PRESTRESS CORP. SAND PLANT #1	0838-89 SAND
H D BROWN DBA 527 DIRT CO. 52 DIRT MINE	1603-89 SAND
H D BROWN DBA 527 DIRT CO. 527 DIRT MINE	1153-89 SAND

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains the Towns of Kingtree and Lane and a portion of the Town of Greeleyville. Water infrastructure is located in and around all three towns, but sewerage infrastructure is located only in and around the Kingtree area. The US Hwy 52 corridor has the potential for residential, commercial, and industrial growth in the future due to the combination of an increase in the capacity of the sewage treatment plant, one existing and two new proposed industrial areas, and an existing rail line. Outside of this area, the watershed is rural with predominately agricultural and timberland uses.